## ABSTRACT OF THE DISCLOSURE

## TASK SPECIFIC CODE GENERATION FOR SPEECH RECOGNITION DECODING

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A code generation program is provided that reads in the task-specific parameters of a speech recognition system and produces a source-language decoder program that is specialized to these parameters. The decoder program is then compiled and distributed. The process of profile-driven code optimization may be used to further enhance the output program. For ease of distribution, the system may be compiled in several parts, and assembled (linked) later, for example through the mechanism of dynamically loaded libraries.